

REMARKS

The Office Action dated December 10, 2008, has been received and carefully noted. The above amendments and the following remarks are submitted as a full and complete response thereto.

Claims 1-31 are currently pending and are respectfully submitted for consideration. By this Amendment, claims 1, 20, 21, 24-26, 28, and 31 have been amended. Support for the amendments to the claims can be found on at least page 6, last paragraph of the specification as originally filed. No new matter has been added. The amendments to the claims do not narrow the scope of the claims.

In the Office Action, Claim 25 was objected to for containing an informality therein. In response, Claim 25 has been amended. Withdrawal of the objection to Claim 25 is thus respectfully submitted.

Claims 1-31 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite. The Office Action mainly asserts that the claims have not specified what will happen when the "if" condition is not met.

In response, Applicants respectfully submit that for the person of ordinary skill in the art to which the invention pertains, after reviewing the description and the drawings of the application as originally filed, it would immediately be evident that if the synonym set was not updated, the comparison to the synonym set would comprise a comparison to a non-updated synonym set. Thus, the language of the claims should be clear in that the comparison to the updated synonym set would only occur if the synonym set was updated, otherwise the comparison occurs with the non-updated synonym set. This

operation is explained, for example, on page 13, lines 14-16 of the International publication, see also Figure 2, in particular the update loop in relation to database elements 121, 104, and 122, and blocks 201 and 111. Based on the above, Applicants respectfully request that the Examiner reconsider and withdraw the 35 USC §112, second paragraph, rejection of Claims 1-31.

Claims 1-23, 26-28, and 31 were rejected under 35 U.S.C. §101 for being directed to non-statutory subject matter. It is noted that Claims 1, 21, 26, 28, and 31 have been amended to recite a processor and that the synonym set is stored in a computer readable database. Such revisions introduce a "storage component," as suggested by the Examiner. Thus, the rejection of Claims 1-23, 26-28, and 31 under 35 U.S.C. §101 should be withdrawn.

Further, Claims 1-6, 9, and 13-31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pub. No. US 2004/0064447 to Simske et al. ("Simske") in view of U.S. Pub. No. US2004/0024760 to Toner et al. ("Toner"). Claims 7-8 were rejected under 35 U.S.C. 103(a) as being unpatentable over Simske in view of Toner, and further in view of U.S. Pub. No. 2002/0078024 to Bellany et al. ("Bellany"). Claims 101-12 were rejected under 35 U.S.C. 103(a) as being unpatentable over Simske in view of Toner and further in view of U.S. Pub. No. US2004/0181758 to Murakami et al. ("Murakami")

It is noted that Claims 1, 20-21, 24-26, 28, and 31 have been amended. To the extent that the grounds for the rejections are still applicable to the currently pending claims, the rejections are respectfully traversed for at least the following reasons.

Claim 1, as claimed, recites that if the predetermined synonym acceptance criterion is fulfilled, associating the value of the data field and the synonym candidate as synonyms and automatically updating a synonym set associated with the value of the data field by adding the synonym candidate to the synonym set in a computer readable database without intervention of a user before searching for a counterpart. Similar features are also recited in independent Claims 21, 24-26, 28-29, and 31.

According to the Office Action, Simske disclose every feature of the claimed invention except Simske does not explicitly disclose that the data field is from a record and the synonyms take into account writing variations, see the second paragraph on page 12 of the Office Action. Applicants respectfully disagree.

Simske relates to a system and method for computerized searching for desired information from a corpus of information. As mentioned for example in paragraph [0010] on page 2, see the second sentence, the problem Simske aims to solve relates to crafting suitable search queries. As is clear, e.g., from paragraph [0011], the synonyms referred to by Simske are words that are substantially interchangeable in conveying a particular idea. Simske is not in anyway concerned with maintenance of a synonym database, not to mention that it would disclose updates of a synonym database while a searching procedure is ongoing, wherein the update is automatic without the intervention of a user before the searching step takes place.

The passage in Simske referred by the Office Action is based on an ontology model, wherein synonyms can be rated for their closeness in meaning of proximity to the original word to generate a search list. As the skilled person is aware, ontology models

are based on meanings and not writing variations of a term. As explained in [0104] of Simske, the various synonyms for list may be weighted according to a determined proximity to the term. However, Simske does not disclose, or even hint of the possibility of automatically updating a synonym set associated with the value of the data field by adding a found synonym to the synonym set in the computer readable database without intervention of a user taking place. Instead, the referenced Figure 6, block 605, concentrates on the weighting for each possible synonym query, as explained in paragraph [0105], with no hint of any possibility of updating anything. Instead, all that is done is generation of a one off query for that particular search.

The search for synonyms for a one off search query is based on use of ontology models which is not the same as the step of determining if a synonym candidate and the value of the analyzed data field fulfills a predetermined synonym acceptance criterion, taking into account writing variations, for example, if the characters in the fields deviate from each other less than a pre-defined amount. In the present invention, the meaning of the word is of no importance. Instead, for example, a misspelled street name is compared to a target, i.e., a correctly spelled street name, and if the difference in the spelling satisfies predefined criteria, a new synonym is determined as being found and a synonym database is immediately and automatically updated.

Different from this, and as explained in paragraphs [0045] and [0046] of Simske, there is provided a tool for generating search queries for a synonym search. As Simske explains, a user may select, via a user interface, the breadth of the synonymic search query from specific to general. The user may also select the synonyms to be used in the

query. As explained in paragraph [0046], the user is presented with the possible synonyms and has the option of selecting those synonyms to be included in the constructed synonymic search query. Thus, the user input is of essential importance in the search query generation and is remote from the concept of an automatic update of a synonym database. Instead of this, in Simske, a one time search query is formed, which query is not stored or used in later searches, and no database is updated based on the generated one off search query.

Therefore, it is clear that the cited invention is not only novel with regards to Simske, but it also relates to a totally different operation, namely to updating and maintaining synonym databases.

Toner relates to search technologies and/or data association where names of foreign origin are matched to names in English by converting the names in the idealized, or normalized, versions of themselves based on their true spelling in their original language. The idealization process is based on phonetic searching method rather than one that takes into account writing variations, as required in the present invention. There is nothing in Toner about updating a synonym set by adding a synonym candidate to the synonym set. In Toner, no such update takes place, but instead it updates a record corresponding to the match with a pointer of the matching row, see paragraph [0113] of Toner. As previously argued, Toner does not teach or suggest the possibility of updating a synonym set.

As described above, Simske and Toner, when taken singly or in combination, do not teach or suggest at least the combinations of features of if the predetermined

synonym acceptance criterion is fulfilled, associating the value of the data field and the synonym candidate as synonyms and automatically updating a synonym set associated with the value of the data field by adding the synonym candidate to the synonym set in a computer readable database without intervention of a user before searching for a counterpart, as recited in Claim 1, and similarly in Claims 21, 24-26, 28, and 31. Accordingly, it would not have been obvious for one skilled in the art to combine Simske and Toner to achieve the subject matter of the claims.

Based on the above, Claims 1, 21, 24-26, 28, and 31, as amended, are allowable over the cited art.

Bellany and Murakami do not cure the above-described deficiency of Simske and Toner. As previously submitted, Murakami concentrates on classifying unclassified data and relates to handling of large amounts of document data as a corpus and is applied to generation of candidate synonyms for a word appearing in a document based on text mining, which, however, is not what is claimed in the present invention. Bellany relates to a method for retrieving a desired postal address from a plurality of postal addresses. However, the method of Bellany does not automatically update the postal address.

At least based on the above reasons, Claims 2-20, 22-23, 27, and 29-30, which depend from Claims 1, 21, 27, or 28, are likewise allowable at least due to their dependencies from allowable independent claims and additional features recited therein.

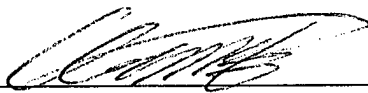
Conclusion

In view of the foregoing, reconsideration of the application, withdrawal of the outstanding rejections, allowance of the currently pending claims, and the prompt issuance of a Notice of Allowability are respectfully solicited.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing docket number 108800-00007**.

Respectfully submitted,



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